

**Table III-1: Potential Benefits of Farmland Preservation**

Potential Benefits of Farmland Preservation	Who Receives the Benefit	Type of Benefit:
<p>1. Local net tax revenue gains. Farmers may generate more in local revenues than it costs to provide them public services. Farmlands require few public services while residential development puts a heavy burden on local government to build schools, provide public safety, fire protection, etc. Studies suggest commercial growth increases the tax base but it may not create enough revenue to cover the deficit generated by expanding residential development.</p>	<ul style="list-style-type: none"> <li>• Local taxpayers <sup>1</sup></li> </ul>	Use
<p>2. Protected land may increase the value of property nearby. Positive housing amenities may include open space, decreased congestion, culture, wildlife, etc.</p>	<ul style="list-style-type: none"> <li>• Land owners</li> </ul>	Use
<p>3. Farms support other industries and markets in all areas of agriculture including produce markets, livestock markets, nurseries, orchards, processing plants, farm equipment dealers, and farm supply businesses.</p>	<ul style="list-style-type: none"> <li>• Direct benefits to farmers and related businesses</li> <li>• Nonusers <sup>2</sup></li> </ul>	Use and Nonuse
<p>4. Option value: the present value of the benefit to society of having the option of dealing with social, economic, food security and environmental problems in the future.</p>	<ul style="list-style-type: none"> <li>• All of society</li> </ul>	Nonuse
<p>5. Affordable and accessible food supplies. Local farmers provide a benefit to the community of fresh fruit, meat, grains, feed, and dairy products. Reliable local farms serve the immediate needs of the community.</p>	<ul style="list-style-type: none"> <li>• Local residents</li> <li>• Tourists</li> <li>• Nonusers</li> </ul>	Use and Nonuse
<p>6. Farmland provides environmental benefits. Habitat for wildlife, water shed protection (reduces storm water runoff), and encourages soil and water conservation (net of external environmental costs due to ground water contamination). Biodiversity provides economic, medicinal, and scientific benefits of certain species that, as of yet, remain unknown.</p>	<ul style="list-style-type: none"> <li>• Benefits to users (tourists, hikers, campers, naturalists, outdoor recreationists) and nonusers</li> <li>• Nonusers <sup>3</sup></li> </ul>	Use and Nonuse
<p>7. Farmland provides intangible benefits, such as scenic, aesthetic, cultural, and historical benefits</p>	<ul style="list-style-type: none"> <li>• Tourists</li> <li>• Nonusers <sup>2</sup></li> </ul>	Use and Nonuse
<p>8. Bequest value. The present value of the benefits to society of knowing that future generations will benefit from all aspects of farming.</p>	<ul style="list-style-type: none"> <li>• All of society</li> </ul>	Nonuse
<p><sup>1</sup> If funding for farm preservation is local, the local net tax revenue gains for rural communities may be negative if a smaller local population shares a larger burden of the public expenditure to protect farmland.</p> <p><sup>2</sup> Indirect benefits for those interested in preserving the heritage and culture.</p> <p><sup>3</sup> Indirect benefits for those interested in the existence of certain species of flora and fauna.</p>		

# Cost of Community Services Studies



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*Cost of Community Services studies examine both the tax revenues generated by different land uses and the costs to local government of providing services to those same uses. They help people understand the fiscal consequences of keeping land in agriculture or as open space versus developing land for other purposes.*

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## Introduction

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Cost of Community Services (COCS) studies help people understand the fiscal impacts associated with different types of land use. COCS studies show that the fiscal consequences of different land uses vary significantly, in terms of both tax revenues received *and* local government services expenses incurred.

The results of a COCS study are in the form of an easy to understand ratio that compares how many dollars of local government services are required for every dollar in taxes collected. Common services include road repair, sewer maintenance, and public schools (schools constitute an especially large portion of government spending in residential areas). A ratio greater than 1.0 means that for every dollar of revenue collected from a given category of land, more than one dollar is spent on services for that land. A ratio below 1.0 means the government spends less in services for the land than it receives in tax revenue, resulting in a net gain. (Examples: a ratio of 1.32 means that \$1.32 is spent in government services for every tax dollar collected; a ratio of 0.07 means that 7 cents are spent for every dollar collected.)

Because COCS studies can be conducted quickly and inexpensively, they are an easy yet informative tool for local governments to use when planning for the future of their community.

COCS studies also dispel common misconceptions about the fiscal impacts of land use. They show that farmland and open space consistently deliver large net gains to government finances, while residential development is usually a drain on government budgets.

## History

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COCS studies were first introduced in the mid-1980s by the [American Farmland Trust](#), primarily because farmland is the most common land type converted to development. The organization wanted to devise an easy and inexpensive method for rural communities to measure the contribution agricultural lands make to their local tax base.

Since that time, the American Farmland Trust has documented more than 150 local governments in 26 states that have conducted COCS studies.

## Findings

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Nearly all COCS studies show that residential land is a net drain on local governments, with a ratio above 1.0. The ratios for the other two land use categories studied (commercial/industrial and farmland/open space) are usually well below 1.0, representing net gains for local governments.

The chart below shows the results of COCS studies conducted in 15 Pennsylvania townships—every Pennsylvania study known to the authors. In each case, farmland and open space deliver significant positive fiscal impacts to the community.

To view results from other states and national averages, see the [“Cost of Community Services Studies”](#) fact sheet from the American Farmland Trust.

Community	Residential	Commercial/ Industrial	Open Space Farmland/ Open Space	Source
Allegheny Township	1.06	0.14	0.13	Kelsey, 1997
Bedminster Township	1.12	0.05	0.04	Kelsey, 1997
Bethel Township	1.08	0.17	0.06	Kelsey, 1992
Bingham Township	1.56	0.16	0.15	Kelsey, 1994
Buckingham Township	1.04	0.15	0.08	Kelsey, 1996
Carroll Township	1.03	0.06	0.02	Kelsey, 1992
Hopewell Township	1.27	0.32	0.59	SCAEG, 2002
Kelly Township	1.48	0.07	0.07	Kelsey, 2006
Lehman Township	0.94	0.20	0.27	Kelsey, 2006
Maiden Creek Township	1.28	0.11	0.06	Kelsey, 1998
Richmond Township	1.24	0.09	0.04	Kelsey, 1998
Shrewsbury Township	1.22	0.15	0.17	SCAEG, 2002
Stewarson Township	2.11	0.23	0.31	Kelsey, 1994
Straban Township	1.10	0.16	0.06	Kelsey, 1992
Sweden Township	1.38	0.07	0.08	Kelsey, 1994

Source: "Cost of Community Services Studies" (Farmland Information Center, 2016)

## Interpretation of Findings

COCS studies are valuable because they paint an accurate picture of a local government's current costs and revenue as it relates to classes of land use. This picture offers people a basis from which to understand how development—and conservation—relate to government services and budgets.

Because of the many variables involved, the ratios in a COCS studies cannot be used to accurately project the service costs or tax revenues of new development, especially if the new development differs substantially from existing developments. (To learn more about predicting these ratios, see "Costs and Revenues of Residential Development: A Workbook for Local Officials and Citizens.")

## Implementation

COCS studies are relatively simple to create and understand. They are inexpensive, and, depending on the size of the jurisdiction, can be conducted in just a few hours. They use easy-to-access data and require no expertise; to calculate the results, you need only a basic understanding of municipal financing and mathematics.

The Penn State Cooperative Extension offers a manual with step-by-step instructions to conduct a COCS study. The manual includes a section that helps the reader understand and interpret the outcomes of the study.

The Farmland Information Center, the research branch of the American Farmland Trust, conducts COCS studies using similar methodology, with only a slight difference in the accounting of expenses and revenues.

## Conclusion

COCS studies help local government officials understand the fiscal implications of different land uses. With the results of COCS studies informing their thinking, these officials can more effectively and responsibly make decisions, set policies, and plan for the future of their communities.

COCS studies can also support conservation efforts, which are often hampered by misconceptions and false assumptions about the fiscal consequences of protecting land from development—especially the impact on taxpayers. By presenting the impacts of preserved farmland and open space in a financial framework that is easy to interpret, COCS studies counter these misconceptions.

COCS studies offer overwhelming evidence that, in most cases, conservation saves local governments money. This conclusion gives those already compelled by the environmental benefits yet another layer of justification. More importantly, it informs those who might be unconvinced by environmental and social arguments but value fiscal responsibility, giving them a reason to care about protecting farms and open space.

## Resources at ConservationTools.org

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To find experts and other information on the topics covered by this guide, see the right-hand column of the on-line edition at

<http://conservationtools.org/guides/15>

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## Submit Comments

Help improve the next edition of this guide. Email your suggestions to the Pennsylvania Land Trust Association at [aloza@conserveland.org](mailto:aloza@conserveland.org). Thank you.

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